

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 20826/311945	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, Item 5 below.	
International application No. PCT/US2004/038172	International filing date (day/month/year) 15/11/2004	(Earliest) Priority Date (day/month/year) 17/11/2003
Applicant: MAGNA INTERNATIONAL INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box II).

3. ☐ Unity of invention is lacking (see Box III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

- a. the figure of the drawings to be published with the abstract is Figure No. 2

☐ as suggested by the applicant.

☒ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application no.

PCT/US2004/038172

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A method and apparatus for hydroforming a metal part includes placing a part to be formed (510) within a die (512), closing the die to enclose the part to be formed, and introducing a high pressure fluid to an interior of the die for expanding the part against an interior surface of the die. The high pressure fluid has a pulse applied thereto for increasing a material flow of the part within the die.

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 B21D26/02 B21D26/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 B21D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
 EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99/41028 A (DAIMLERCHRYSLER AG; BIKERT, ARNDT; BOBBERT, STEFAN) 19 August 1999 (1999-08-19) page 3, paragraph 5 - page 6, paragraph 2; figures 1,2	1-15
X	DE 100 19 912 A1 (FORSCHUNGSGESELLSCHAFT UMFORMTECHNIK MBH) 31 October 2001 (2001-10-31) column 2, line 7 - column 3, line 24; figures 1,3	1-3,5-7, 9,11,15
A		4,8,10, 12
X	EP 0 985 465 A (KABUSHIKI KAISHA OPTON) 15 March 2000 (2000-03-15) column 8, line 51 - column 9, line 51; figures 1,6	1,2,5,6, 9,11,15
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *&* document member of the same patent family

Date of the actual completion of the international search

7 March 2005

Date of mailing of the international search report

31/03/2005

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Authorized officer

Ritter, F

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 38 40 939 A1 (KUHN, RAINER, DIPL.-ING., 6690 ST WENDEL, DE) 7 June 1990 (1990-06-07) claims 1,4,5; figures 1,2,5	1,3,5,7, 9,15
X	DE 197 51 035 A1 (FORSCHUNGSGESELLSCHAFT UMFORMTECHNIK MBH, 70174 STUTTGART, DE; FORSCHU) 27 May 1999 (1999-05-27) column 1, line 66 - column 2, line 34; claims 1,4,7,8; figures 1-5	1-3,5-7, 9,11,15

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9941028	A	19-08-1999	DE 19805172 A1	19-08-1999
			AT 220580 T	15-08-2002
			BR 9907797 A	17-10-2000
			CA 2320096 A1	19-08-1999
			DE 59902034 D1	22-08-2002
			WO 9941028 A1	19-08-1999
			EP 1054744 A1	29-11-2000
			ES 2178874 T3	01-01-2003
			HU 0101218 A2	28-08-2001
			JP 2002502706 T	29-01-2002
			PL 342219 A1	21-05-2001
			US 6282934 B1	04-09-2001
DE 10019912	A1	31-10-2001	NONE	
EP 0985465	A	15-03-2000	JP 3022506 B2	21-03-2000
			JP 2000084624 A	28-03-2000
			JP 2999757 B2	17-01-2000
			JP 2000084625 A	28-03-2000
			DE 69913057 D1	08-01-2004
			DE 69913057 T2	26-08-2004
			EP 0985465 A2	15-03-2000
			KR 2000023010 A	25-04-2000
			US 6128936 A	10-10-2000
DE 3840939	A1	07-06-1990	DE 3906958 A1	06-09-1990
DE 19751035	A1	27-05-1999	NONE	